

WHAT IS CLAIMED IS:

1. A multi-channel management apparatus that is applied  
to a multi-channel input system for making cordless  
connection between a plurality of terminals and a plurality  
5 of input apparatuses corresponding to these terminals based  
on a multi-channel system, the multi-channel management  
apparatus comprising:

a management unit which manages a setting status of  
each channel in the multi-channel input system; and

10 a notification unit which notifies the setting status  
to a particular one of the terminals according to a request  
from the particular terminal.

2. The multi-channel management apparatus according to  
15 claim 1, further comprising an interference channel  
candidate extraction unit which selects a channel as a  
candidate interference channel having a possibility of the  
occurrence of interference at the time of updating a set  
channel, and notifies the interference channel to a terminal,  
20 when this channel other than the set channel has a data  
reception during a period while the set channel set at the  
terminal has no data reception.

3. A multi-channel management method that is applied to a multi-channel input system for making cordless connection between a plurality of terminals and a plurality of input apparatuses corresponding to these terminals based on a multi-channel system, the multi-channel management method comprising:

managing a setting status of each channel in the multi-channel input system; and

notifying the setting status to a particular one of the terminals according to a request from the particular terminal.

4. A computer program containing instructions which when executed on a computer causes the computer to function as:

a management unit which manages a setting status of each channel in a multi-channel input system for making cordless connection between a plurality of terminals and a plurality of input apparatuses corresponding to these terminals based on a multi-channel system; and

a notification unit which notifies the setting status to a particular one of the terminals according to a request from the particular terminal.

5. A multi-channel terminal that is in cordless connection to an input apparatus by utilizing a set channel that has been set in advance out of a plurality of channels based on a multi-channel system, the multi-channel terminal comprising:

a checking unit which checks presence or absence of a data reception in a channel other than a set channel during a period while the set channel has no data reception; and

an interference channel candidate extraction unit which selects a channel as a candidate interference channel having a possibility of the occurrence of interference at the time of updating the set channel, when the checking unit has detected a data reception.

6. The multi-channel terminal according to claim 5, further comprising a notification unit which notifies the candidate interference channel to a user.

7. The multi-channel terminal according to claim 6, wherein the notification unit notifies a setting status of each channel of the multi-channel system, in addition to the interference channel.

8. The multi-channel terminal according to claim 5,  
further comprising an interruption processing unit which  
interrupts a processing to execute a processing of received  
data, when a set channel has received data while the checking  
5 unit is checking.

9. The multi-channel terminal according to claim 5,  
wherein the checking unit destroys data that has been  
received during the checking.

10

10. A multi-channel interference management method  
applied to a multi-channel terminal that is in cordless  
connection to an input apparatus by utilizing a set channel  
that has been set in advance out of a plurality of channels  
15 based on a multi-channel system, the multi-channel  
interference management method comprising:

checking presence or absence of a data reception in  
a channel other than a set channel during a period while  
the set channel has no data reception; and

20

when it is decided in the checking process that there  
is data reception, selecting a channel as a candidate  
interference channel having a possibility of the occurrence  
of interference at the time of updating the set channel.

25

11. A computer program containing instructions which when executed on a computer causes the computer to function as:

a checking unit which checks presence or absence of a data reception in a channel other than a set channel during a period while the set channel set in advance out of a plurality of channels has no data reception, at a multi-channel terminal that is utilized for making cordless connection to an input apparatus based on a multi-channel system; and

an interference channel candidate extraction unit which selects a channel as a candidate interference channel having a possibility of the occurrence of interference at the time of updating the set channel, when the checking unit has detected a data reception.

12. A multi-channel setting apparatus that is applied to a multi-channel input system for making cordless connection between a plurality of terminals and a plurality of input apparatuses corresponding to these terminals based on a multi-channel system, the multi-channel setting apparatus comprising:

a management unit which manages a setting status of each channel in the multi-channel input system; and

a setting unit which finds a free channel based on the setting status, and sets the free channel to between

a terminal that requires the setting of a channel and an

input apparatus corresponding to this terminal.

13. A multi-channel setting method that is applied to a multi-channel input system for making cordless connection  
5 between a plurality of terminals and a plurality of input apparatuses corresponding to these terminals based on a multi-channel system, the multi-channel setting method comprising:

managing a setting status of each channel in the  
10 multi-channel input system; and

finding a free channel based on the setting status, and setting the free channel to between a terminal that requires the setting of a channel and an input apparatus corresponding to this terminal.

15

14. A computer program containing instructions which when executed on a computer causes the computer to function as:

a management unit which manages a setting status of each channel in a multi-channel input system that makes  
20 cordless connection between a plurality of terminals and a plurality of input apparatuses corresponding to these terminals based on a multi-channel system: and

a setting unit which finds a free channel based on the setting status, and sets the free channel to between  
25 a terminal that requires the setting of a channel and an

input apparatus corresponding to this terminal.